What is claimed is:

1. A compound as shown in formula (A):

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$$\begin{array}{c} O \\ R \\ \hline \\ HO \\ \end{array}$$

wherein,

R is methyl, ethyl, propyl, iso-propyl, or butyl;

W is

- R' is methyl, ethyl, propyl, *iso*-propyl, or butyl; R'' is methyl, ethyl, propyl, *iso*-propyl, or butyl; and M is a metal ion.
- 2. The compound of Claim 1 having the following formula:

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wherein R is as defined above.

3. The compound of Claim 1 having the following formula:

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Formula (II)

wherein R is as defined above; and

M is lithium, sodium, potassium or calcium.

5 4. The compound of Claim 1 having the following formula:

wherein, R, R', and R" are as defined above; and

M is lithium, sodium, potassium or calcium.

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5. The compound of Claim 1, wherein the compound is selected from the group consisting of:

Compound 1: 2,2-dimethylbutyricacid-3-hydroxy-8-[2-(4-hydroxy-6-oxo-tetrahydro pyran-2-yl)-ethyl]-7-methyl-1,2,3,7,8,8a-hexahydronaphthalen-1-yl ester;

Compound 2: the compound of formula (II), wherein R=methyl, M=K;

Compound 3: the compound of formula (III), wherein R=R'=R'=methyl, M=K.

6. A pharmaceutical composition comprising an effective amount of the compound of formula (A) and a pharmaceutically acceptable carrier.

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7. The synthetic method of the compound of formula (I), wherein the method comprises the steps of:

starting from pravastatin, after the protection of the carboxylic group with formation of alkali metal salt, the 2-position of the 2-methylbutyryl group in the 8-posotion of the hydrogenated naphthalene is alkylated with alkyl halide;

or the method comprises the following steps:

starting from pravastatin, after the carboxylic group is converted into amide and the hydroxyl group is protected by siloxane, the 2-methylbutyryl group in the 8-posotion of the hydrogenated naphthalene is transformed into 2,2-dimethylbutyryl group with alkyl halide.

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8. The synthetic method of the compound of formula (II), comprising the steps of: reacting β -hydroxyl carboxylic acid, i.e., the product of the ring-opening reaction of the compound of formula (I), with a base of formula MOH, thereby forming the compound of formula (II), wherein M is lithium, sodium or potassium.

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9. The synthetic method of the compound of formula (III), comprising the steps of: in the presence of ketone or 2,2-dialkoxylpropane, converting the β , δ -dihydroxyl carboxylic acid, i.e., the product of the ring-opening reaction of the compound of formula (I), into 6-member ring ketal by acid catalysis, and

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reacting the ketal with the base of formula MOH, thereby forming the compound of formula (III),

wherein M is lithium, sodium or potassium.

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10. A use of the compound of formula (A) in the manufacture of drugs for inhibiting hydroxylmethyl glutaryl coenzyme A reductase.